

CLAIMS

THE INVENTION CLAIMED IS:

1. A valve, comprising:
 - a valve body defining a passage;
 - a semi-circular sleeve including opposed edges sealingly mated with an interior of the valve body and a displaceable middle portion; and
 - a port located in the valve body adjacent the sleeve and adapted for fluid communication with a pressurized fluid source,wherein when fluid is introduced through the port, the middle portion of the sleeve is displaced into the passage to at least partially close the passage.
2. The valve according to claim 1, wherein:
 - the valve body includes a first body sleeve-receiving member and a second body member connected to define the passage, and
 - the middle portion of the sleeve, when in a fully open state, is adjacent the first sleeve-receiving body member.
3. The valve according to claim 2, wherein the first sleeve-receiving body member and the second body member are semi-circular in cross-section.
4. The valve according to claim 2, wherein:
 - the first sleeve-receiving body member includes opposed side flanges,
 - the second body member includes opposed side flanges,
 - the sleeve includes opposed side flanges, and
 - the first sleeve-receiving body member and the second body member are connected such that the sleeve side flanges are positioned between the first sleeve-receiving body member side flanges and the second body member side flanges.
5. The valve according to claim 2, wherein:
 - the first sleeve-receiving body member includes opposed end flanges,
 - the second body member includes opposed end flanges,
 - the sleeve includes opposed end flanges,

the sleeve end flanges are positioned adjacent the end flanges of the first sleeve-receiving body member, and

a gasket is positioned on an opposite side of the passage from each sleeve end flange.

6. The valve according to claim 2, wherein when the middle portion of the sleeve is adjacent the first sleeve-receiving body member:

an inside diameter of the first sleeve-receiving body member is substantially equal to an outside diameter of the middle portion of the sleeve, and

an inside diameter of the second body member is substantially equal to an inside diameter of the middle portion of the sleeve.

7. The valve according to claim 2, further including a channel connected to and extending along the second body member within the passage, wherein when the middle portion of the sleeve is fully displaced, the channel prevents the passage from being completely closed off by the sleeve.

8. The valve according to claim 2, wherein the sleeve is made of an elastomeric material.

9. A method of controlling flow in a passage, comprising the steps of:
positioning a semi-circular sleeve within the passage with a middle portion of the sleeve adjacent a valve body,

passing a process fluid through the passage when the sleeve is in a fully open state, and

introducing a closing fluid into a space between the middle portion of the sleeve and the valve body, thereby displacing the middle portion of the sleeve into the passage and restricting the flow of the process fluid through the passage.

10. The method according to claim 9, further comprising the step of increasing an amount of the closing fluid introduced into the space, thereby displacing the

middle portion of the sleeve into a fully closed state and completely restricting the flow of the process fluid through the passage.

11. The method according to claim 9, further comprising the step of increasing the amount of the closing fluid introduced into the space, thereby displacing the middle portion of the sleeve into a fully closed state, contacting the middle portion of the sleeve with a channel located within the passage, completely restricting the flow of the process fluid through the passage between the channel and the middle portion of the sleeve, but permitting the flow of the process fluid within the channel.